

COURSE OUTLINE

Week No.	Week of...	Lecture chapter	Topic (RHK = Resnick/Halliday/Krane, Physics Vol. 1) (Purcell = Electricity and Magnetism)	Problem Set No.	Due 5 PM on...	Lab
1	18-Jan	MARTIN LUTHER KING HOLIDAY (18-Jan) RHK (22), 25.7 23.1-23.4	Thermal expansion; heat transfer Kinetic definition of temperature		(do experiment in lab="expt") (have discussion in lab="disc") no lab	
2	25-Jan	23.5-23.6 24.1-24.4	Energetics of an ideal gas; equipartition Maxwellian distribution	1	Th 28-Jan	disc
3	1-Feb	25.4-25.6 26.1-26.4	Heat capacities of an ideal gas; first law Second law of thermodynamics	2	4-Feb	expt
4	8-Feb	RHK 26.5-26.9 Purcell 1.1-1.8 PRESIDENTS' DAY HOLIDAY (15-Feb)	Entropy Electric charge	3	11-Feb	disc
5	15-Feb	1.9-1.15 2.1-2.6	Electric fields Electric potential	4	18-Feb	disc
6	22-Feb	2.7-2.13 3.1-3.4	Gauss' law, Laplace's equation Electric fields around conductors	5	25-Feb	expt
7	1-Mar 4-Mar	3.5-3.8 11:10 AM - 12:30 PM	Systems of conductors; capacitors MIDTERM EXAMINATION (covers PS 1-5)			disc
8	8-Mar	4.1-4.11 Appendix A	Electric currents Special relativity	6	11-Mar	expt
9	15-Mar	Appendix A 5.1-5.5	Special relativity Electric field in different frames of reference	7	18-Mar	disc
	22-Mar	SPRING RECESS (22-26 Mar)			25-Mar	disc
10	29-Mar	5.6-5.9 6.1-6.2, 6.4-6.5	Fields of moving charges Magnetic fields	8	1-Apr	expt
11	5-Apr	6.3, 6.6-6.9 7.1-7.5	Vector potential; magnetic field transformation Faraday's law	9	8-Apr	disc
12	12-Apr	7.6-7.10 8.1-8.5	Inductance AC circuits	10	15-Apr	expt
13	19-Apr	9.1-9.4; 9.6 10.1-10.6	Maxwell's equations Electric dipoles	11	22-Apr	disc
14	26-Apr	10.7-10.12 11.1-11.6	Electric fields in dielectric media Magnetic dipoles (but not monopoles)	12	29-Apr	disc
15	3-May	11.7-11.11	Magnetization LAST LECTURE (review)	13	6-May	disc
10-May	INSTRUCTION ENDS (10-May)					makeup
17-May		FINAL EXAMS BEGIN (14-May)				
19-May	8-11 AM		FINAL EXAM (Group 12) (covers PS 1-13)			